

## Discovery of Worker Caste in *Trachymesopus darwinii* (FOREL, 1893)

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The bizarre ponerine ant, *Trachymesopus darwinii*, has been known only from the female caste since FOREL's description (1893). Although this species is widely distributed from the tropical Africa to the Indo-Australian Region, most of the cases included only alate females attracted by light (CHAPMAN & CAPCO, 1951; WILSON, 1958; BROWN, 1963).

Recently I had the good fortune to examine a colony sample of this species, including female and worker castes, from Okinawa-hontô Island, the Ryûkyûs. In this short paper I will briefly describe the worker caste of *Trachymesopus darwinii* with illustration.

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### *Trachymesopus darwinii* (FOREL, 1893)

*Belonopelta darwinii* FOREL, 1893, Annl. Soc. ent. Belg., 37: 460.

*Pachycondyla* (*Pseudoponera*) *darwinii* [sic]; EMERY, 1901, Annl. Soc. ent. Belg., 45: 46.

*Pseudoponera darwinii* [sic]; BINGHAM, 1903, Fauna Brit. India, Hym., 2: 93.

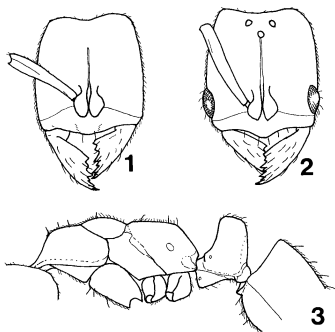
*Euponera* (*Trachymesopus*) *darwinii* [sic]; EMERY, 1911, Genera Insect., Ponerinae, fasc. 118: 86.

*Trachymesopus darwinii* [sic]; WILSON, 1958, Bull. Mus. comp. Zool., 119: 353.

**Description of worker.** Head length 0.92-1.00 mm; head width 0.85-0.92 mm; scape length 0.70-0.74 mm; cephalic index 92-93; scape index 80-83; WEBER's length of alitrunk 1.38-1.48 mm; dorsal pronotal width 0.60-0.65 mm; petiole length 0.38-0.41 mm; petiole height 0.65-0.68 mm; dorsal petiole width 0.43-0.48 mm; total length 4.3-4.9 mm.

Head rectangular, slightly longer than wide, with convex occipital border. Mandible with 7 teeth; apical, basal 3rd and 5th teeth longer than the others; basal mandibular pit absent. Eyes small, consisting of only 2-4 facets. Maxillary palpi 4-segmented; labial palpi 3-segmented. General form of alitrunk and petiole as in Fig. 3. Petiole thick, with developed triangular subpetiolar process. Middle and hind tibiae each with a pectinate spur and smaller simple spur; outer face of middle tibia without spine-like setae. Yellowish pubescence abundant on the body with head; dorsal surface of alitrunk, petiole and gaster with short erect hairs. Color reddish brown to yellowish brown.

**Material examined.** 1 alate female, 6 workers, Nishihara, Okinawa-hontô Is., Japan (nesting in a rotten wood), 9-X-1988, K. MURATA & J. HAMANISHI legs.; 3 alate females, Tomishiro, Okinawa-hontô Is., Japan (at light), VIII-1987, Y. KUSUI leg.; 1 alate female, Iriomote-jima Is., Japan, 24-VIII-1978, T. NAMBU leg.; 1 alate female, Chihpen, Taitung City, Taiwan (at light), 29-VII-1982, M. TERAYAMA leg.; 1 alate female, Nanshanchi,



Figs. 1-3. *Trachymesopus darwinii* (FOREL). — 1, Worker, head, frontal view; 2, female, head, frontal view; 3, worker, alitrunk and petiole, lateral view.

Nantou Hsien, Taiwan (at light), 14-VIII-1985, M. TERAYAMA leg.; 1 worker, Darnley Is., Torres Straight, Papua New Guinea, 14-VII-1974, H. HEATWOLE & E. CAMERON legs. (in CSIRO). Also many females from the various localities of Southeast Asia and Australia in the CSIRO collection.

**Remarks.** The present species belongs to the *darwinii* group of BROWN (1963), which is characterized in females by the absence of basal mandibular pit and anal lobe on the hind wing, palp formula (4, 3), and ferruginous color of body. This group consists of only *darwinii* and its relatives and all of these forms may well represent a single species *darwinii* (BROWN, 1963).

### References

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